

AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

Listing of the Claims

1. (Currently Amended) A ~~computer-readable recording~~ medium storing a data structure for managing reproduction of graphic data by a reproducing apparatus, comprising:

a data area storing a plurality of source packets of a transport stream, each of the source packets including a transport packet extra header and a transport packet[[s]], the transport packets representing ~~a one or more~~ graphic segment[[s]] containing a graphic image for overlay on main video data, the ~~one or more~~ graphic segment[[s]] being multiplexed with ~~into~~ a main video stream including the main video data, wherein

each of the transport packets ~~in~~ of the ~~one or more~~ graphic segment[[s]] have a same packet identifier (PID) and[[,]]

at least one transport packet ~~in~~ of the ~~one or more~~ graphic segment[[s]] includes position information defining a position for the reproducing apparatus to display the graphic image, and

at least one transport packet in the ~~one or more~~ graphic segment[[s]] includes a time stamp of the graphic image[[s]].

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Currently Amended) A method of reproducing a data structure for managing reproduction of graphic data from a recording medium, comprising:

reading a plurality of source packets of a transport stream, each of the source packets including a transport packet extra header and a transport packet, the transport packets representing a graphic segment containing a graphic image for overlay on main video data, the graphic segment being multiplexed with a main video stream containing the main video data;

converting the transport stream into a data stream by depacketizing the source packets into the transport packet extra header and the transport packet;

demultiplexing the data stream into a main video stream and the graphic segment;

~~reproducing, from the recording medium, a the main video stream into which main video data and the one or more graphic segments containing a graphic image have been multiplexed, the one or more graphic segments including a plurality of transport packets, wherein~~

each of the transport packets of in the one or more graphic segment[[s]] have a same packet identifier (PID),

at least one transport packet of in the one or more graphic segment[[s]] includes position information defining a position to display the graphic image,

at least one transport packet of in the one or more graphic segment[[s]] includes a time stamp of the graphic image, and

overlaying the graphic image on the main video data according to the position information.

9. (Currently Amended) An apparatus for reproducing a data structure for managing reproduction of graphic data from a recording medium, comprising:

an optical reproducing device configured to read a plurality of source packets of a transport stream from the recording medium, each of the source packets including a transport packet extra header and a transport packet, the transport packets representing a graphic segment containing a graphic image for overlay on main video data, the graphic segment being multiplexed with a main video stream containing the main video data;

a source depacketizer configured to convert the transport stream into a data

stream by depacketizing the source packets into the transport packet extra header and the transport packet;

a demultiplexer configured to demultiplex the data stream into a main video stream and the graphic segment; and

~~reproduce data recorded on the recording medium;~~

~~a controller configured to control the optical reproducing device to reproduce, from the recording medium, the [[a]] main video stream into which main video data and the one or more graphic segment[[s]] containing a graphic image have been multiplexed, the one or more graphic segments including a plurality of transport packets, wherein~~

each of the transport packets in of the one or more graphic segment[[s]] have a same packet identifier (PID),

at least one transport packet in the one or more graphic segment[[s]] includes position information defining a position to display the graphic image, and

at least one transport packet in of the one or more graphic segments includes a time stamp of the graphic image; and

the controller being configured to control the optical reproducing device to overlay the graphic image on the main video data according to the position information.

10. (Currently Amended) A method of recording a data structure for managing reproduction of graphic data on a recording medium, comprising:

recording a plurality of source packets of a transport stream on the recording medium, each of the source packets including a transport packet extra header and a transport packet, the transport packets representing a graphic segment containing a graphic image to be overlaid on main video data, the graphic segment being multiplexed with a main video stream containing the main video data, onto the recording medium, a main video stream into which main video data and one or more graphic segments containing a graphic image for overlay onto the main video data have been multiplexed, the one or more graphic segments including a plurality of transport packets, wherein

each of the transport packets in of the one or more graphic segment[[s]] have a same packet identifier (PID), and

at least one transport packet of in the one or more graphic segment[[s]] includes position information defining a position to display the graphic image, and

at least one transport packet in of the one or more graphic segment[[s]] includes a time stamp of the graphic images.

11. (Currently Amended) An apparatus for recording a data structure for managing reproduction of graphic data on a recording medium, comprising:

an optical recording device configured to record a plurality of source packets of a transport stream on the recording medium, each of the source packets including a transport packet extra header and a transport packet, the transport packets representing a graphic segment containing a graphic image for overlay on main video data, the graphic segment being multiplexed with a main video stream containing the main video data record data on the recording medium;

~~an encoder for encoding at least video data; and~~

~~a controller configured to control the optical recording device to record, onto the recording medium, a main video stream into which main video data and one or more graphic segments containing a graphic image for overlay onto the main video data have been multiplexed, the one or more graphic segments including a plurality of transport packets, wherein~~

each of the transport packets ~~in~~ of the ~~one or more~~ graphic segment[[s]] have a same packet identifier (PID),

at least one transport packet ~~in~~ of the ~~one or more~~ graphic segment[[s]] includes position information defining a position to display the graphic image, and

at least one transport packet ~~in~~ of the ~~one or more~~ graphic segment[[s]] includes a time stamp of the graphic images.

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Currently Amended) The ~~computer-readable recording~~ medium of claim 1, wherein at least one transport packet ~~in~~ of the ~~one or more~~ graphic segment[[s]] includes information on presentation time to display the graphic image, and duration to display the graphic images.

25. (Currently Amended) The method of claim 8, wherein at least one transport packet ~~in~~ of the ~~one or more~~ graphic segment[[s]] includes information on presentation time to display the graphic image, and duration to display the graphic image.

26. (Currently Amended) The apparatus of claim 9, wherein the controller is configured to control the optical reproducing device to reproduce at least one transport packet, ~~in the one or more graphic segments~~, including information on presentation time to display the graphic image, and duration to display the graphic image[[s]].

27. (Currently Amended) The method of claim 10, wherein at least one transport packet ~~in the one or more graphic segments~~ includes information on presentation time to display the graphic image, and duration to display the graphic image.

28. (Currently Amended) The apparatus of claim 11, wherein the controller is configured to control the optical recording device to record at least one transport packet, ~~in the one or more graphic segments~~, including information on presentation time to display the graphic image, and duration to display the graphic image.

29. (Currently Amended) The ~~computer readable recording~~ medium of claim 1, wherein the ~~computer readable recording~~ medium further stores includes a playlist including navigation information for playback control of the main video stream.

30. (Currently Amended) The method of claim 8, further comprising:
reproducing a playlist from the recording medium, the playlist including navigation information for playback control of the main video stream; and
reproducing the ~~one or more~~ graphic segment[[s]] using the playlist.

31. (Currently Amended) The apparatus of claim 9, wherein the controller is configured to control the optical reproducing device to reproduce the ~~one or more~~ graphic segment[[s]] using a playlist, the playlist including navigation information for playback control of the main video stream.

32. (Currently Amended) The method of claim 10, further comprising:
recording ~~onto the recording medium~~ a playlist including navigation information for playback control of the main video stream on the recording medium.

33. (Currently Amended) The apparatus of claim 11, wherein the controller is configured to control the optical recording device to record ~~onto the medium~~ a playlist including navigation information for playback control of the main video stream on the recording medium.

34. (Currently Amended) The ~~computer readable recording~~ medium of claim 29, wherein the playlist includes a graphic mark indexing the graphic image and specifying display duration of the graphic image.

35. (Previously Presented) The method of claim 30, wherein the playlist includes a graphic mark indexing the graphic image and specifying display duration of the graphic image.

36. (Previously Presented) The apparatus of claim 31, wherein the playlist includes a graphic mark indexing the graphic image and specifying display duration of

the graphic image.

37. (Previously Presented) The method of claim 32, wherein the playlist includes a graphic mark indexing the graphic image and specifying display duration of the graphic image.

38. (Previously Presented) The apparatus of claim 33, wherein the playlist includes a graphic mark indexing the graphic image and specifying display duration of the graphic image.

39. (Currently Amended) The ~~computer readable recording~~ medium of claim 29, wherein the playlist includes display information for specifying display start and end times of the graphic image and display position and window size of the graphic image on the main video data.

40. (Previously Presented) The method of claim 30, wherein the playlist includes display information for specifying display start and end times of the graphic image and display position and window size of the graphic image on the main video data.

41. (Previously Presented) The apparatus of claim 31, wherein the playlist includes display information for specifying display start and end times of the graphic image and display position and window size of the graphic image on the main video data.

42. (Previously Presented) The method of claim 32, wherein the playlist includes display information for specifying display start and end times of the graphic image, and display position and window size of the graphic image on the main video data.

43. (Previously Presented) The apparatus of claim 33, wherein the playlist includes display information for specifying display start and end times of the graphic image and display position and window size of the graphic image on the main video data.

44. (New) The recording medium of claim 1, wherein the transport packet extra header includes copy protection information.

45. (New) The method of claim 8, wherein the transport packet extra header includes copy protection information.

46. (New) The apparatus of claim 9, wherein the transport packet extra header includes copy protection information.

47. (New) The method of claim 10, wherein the transport packet extra header includes copy protection information.

48. (New) The apparatus of claim 11, wherein the transport packet extra header includes copy protection information.